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Abstract

THE WORK AND THE EMPLOYMENT OF THE RESEARCH REACTOR WWR-M WITH THE MAXIMUM NEUTRON FLUX 3.10^{14} $\frac{n}{cm^2\ sec}$

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Reactor WWR-M is a modification of the **serial** water-water reactor WWR-C which had the neutron flux 10^{13} $\frac{n}{cm^2\ sec}$ The maximum neutron flux 3.10^{14} $\frac{n}{cm^2\ sec}$ can be obtained in the water trap which is placed in the active zone of the reactor. While employing the reactor WWR-M there accumulated a considerable experience in its exploitation with a high neutron flux.

The increase of the power of the reactor demanded the creation of such additional systems as a closed aired set, a semiautomatic dosimetrical control and others.

Horizontal beams of the reactor WWR-M are applied for the research in nuclear physics and in solid state physics. Specific organization is necessary for each experiment. Some common conditions for the research with high neutron beams are worked out.

After power work of the reactor five additional canals were hollowed in biological shield for experiments in **tangential** geometry of beams.

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